

flagellin.txt

e au-rhee, j?

Ref	Items	Index-term
E1	6	AU-RH
E2	1	AU-RH-GLASS
E3	0	AU-RHEE, J?
E4	304	AU-RICH
E5	1	AU-RICH CLASS-2 ELEMENT
E6	1	AU-RICH CLEMENT
E7	1	AU-RICH CU DEPOSIT
E8	1	AU-RICH CYTOKINE MESSENGER RNA
E9	1	AU-RICH DESTABILIZING ELEMENTS
E10	1	AU-RICH DOMAINS
E11	407	AU-RICH ELEMENT
E12	18	AU-RICH ELEMENT (ARE)
E13	2	AU-RICH ELEMENT (ARE)-BINDING PROTEIN
E14	1	AU-RICH ELEMENT ADENYLATE/URIDYLATE-RICH ELEME
E15	17	AU-RICH ELEMENT ARE
E16	1	AU-RICH ELEMENT BINDING FACTOR
E17	2	AU-RICH ELEMENT BINDING FACTOR 1
E18	3	AU-RICH ELEMENT BINDING PROTEIN
E19	1	AU-RICH ELEMENT BINDING PROTEIN ABP
E20	1	AU-RICH ELEMENT BINDING PROTEIN ARBP PROTEIN
E21	1	AU-RICH ELEMENT BINDING PROTEIN AUBP
E22	1	AU-RICH ELEMENT BINDING PROTEIN 1
E23	1	AU-RICH ELEMENT BINDING PROTEINS
E24	1	AU-RICH ELEMENT DNA
E25	1	AU-RICH ELEMENT MRNA BINDING PROTEIN

Enter PAGE for more

? e au=rhee, jo?

Ref	Items	Index-term
E1	10	AU=RHEE, JK
E2	12	AU=RHEE, JM
E3	0	AU=RHEE, JO?
E4	1	AU=RHEE, JOENG-SEOP
E5	7	AU=RHEE, JOHN
E6	2	AU=RHEE, JOHN C.
E7	3	AU=RHEE, JOHN M
E8	119	AU=RHEE, JOHN M.
E9	34	AU=RHEE, JOHN MOON
E10	1	AU=RHEE, JOHN S
E11	3	AU=RHEE, JOHN S.
E12	3	AU=RHEE, JOHN W.
E13	7	AU=RHEE, JOHN-MOON
E14	1	AU=RHEE, JOHNG M.
E15	1	AU=RHEE, JOHNG MOON
E16	47	AU=RHEE, JONG CHUL
E17	10	AU=RHEE, JONG DAL
E18	60	AU=RHEE, JONG IL
E19	1	AU=RHEE, JONG MO
E20	1	AU=RHEE, JONG MOON
E21	1	AU=RHEE, JONG MUN
E22	1	AU=RHEE, JONG MYUNG
E23	1	AU=RHEE, JONG NAM
E24	3	AU=RHEE, JONG SOOK
E25	1	AU=RHEE, JONG SUNG

Enter PAGE for more

? page

Ref	Items	Index-term
E26	1	AU=RHEE, JONG TAE
E27	205	AU=RHEE, JONG UK
E28	1	AU=RHEE, JONG UK.

E29 1 AU=RHEE, JONG WOO  
 E30 1 AU=RHEE, JONG YONG  
 E31 1 AU=RHEE, JONG-CHAN  
 E32 5 AU=RHEE, JONG-CHUL  
 E33 34 AU=RHEE, JONG-DAL  
 E34 1 AU=RHEE, JONG-DHAL  
 E35 3 AU=RHEE, JONG-HO  
 E36 4 AU=RHEE, JONG-HUN  
 E37 1 AU=RHEE, JONG-IL  
 E38 2 AU=RHEE, JONG-MOON  
 E39 1 AU=RHEE, JONG-TAE  
 E40 1 AU=RHEE, JONG, II  
 E41 1 AU=RHEE, JONGEUN  
 E42 6 AU=RHEE, JONGHO  
 E43 2 AU=RHEE, JONGHWAN  
 E44 20 AU=RHEE, JONGKWANG  
 E45 1 AU=RHEE, JONGNAM  
 E46 4 AU=RHEE, JONGTAE  
 E47 1 AU=RHEE, JONN MOON  
 E48 1 AU=RHEE, JOO HYUNG  
 E49 3 AU=RHEE, JOO WON  
 E50 56 AU=RHEE, JOO YULL  
 Enter PAGE for more

? page

Ref	Items	Index-term
E1	56	AU=RHEE, JOO YULL
E2	2	AU=RHEE, JOO-WON
E3	1	AU=RHEE, JOOH SHICK
E4	2	AU=RHEE, JOON
E5	78	AU=RHEE, JOON HAENG
E6	1	AU=RHEE, JOON HANG
E7	1	AU=RHEE, JOON HYUK
E8	1	AU=RHEE, JOON P.
E9	3	AU=RHEE, JOON S
E10	21	AU=RHEE, JOON S.
E11	3	AU=RHEE, JOON SCHICK
E12	183	AU=RHEE, JOON SHICK
E13	10	AU=RHEE, JOON SHICK*
E14	2	AU=RHEE, JOON W
E15	6	AU=RHEE, JOON W.
E16	8	AU=RHEE, JOON WHAN
E17	2	AU=RHEE, JOON WON
E18	16	AU=RHEE, JOON-HAENG
E19	1	AU=RHEE, JOON-SEONG
E20	25	AU=RHEE, JOON-SHICK
E21	1	AU=RHEE, JOON-SHIK
E22	1	AU=RHEE, JOONG E.
E23	1	AU=RHEE, JOONG EUI
E24	1	AU=RHEE, JOONG GEUN
E25	1	AU=RHEE, JOONG HYUK

Enter PAGE for more

? s e4-e21

2	AU=RHEE, JOON
78	AU=RHEE, JOON HAENG
1	AU=RHEE, JOON HANG
1	AU=RHEE, JOON HYUK
1	AU=RHEE, JOON P.
3	AU=RHEE, JOON S
21	AU=RHEE, JOON S.
3	AU=RHEE, JOON SCHICK
183	AU=RHEE, JOON SHICK

flagellin.txt

```
10 AU=RHEE, JOON SHICK*
 2 AU=RHEE, JOON W
 6 AU=RHEE, JOON W.
 8 AU=RHEE, JOON WHAN
 2 AU=RHEE, JOON WON
16 AU=RHEE, JOON-HAENG
 1 AU=RHEE, JOON-SEONG
25 AU=RHEE, JOON-SHICK
 1 AU=RHEE, JOON-SHIK
S1 364 S E4-E21
```

? s s1 and flagellin

```
364 S1
24182 FLAGELLIN
S2 14 S S1 AND FLAGELLIN
```

? rd

>>>W: Duplicate detection is not supported for File 393.  
Duplicate detection is not supported for File 391.  
Records from unsupported files will be retained in the RD set.  
S3 9 RD (UNIQUE ITEMS)

? t s3/3,k/1-3

>>>W: KWIC option is not available in file(s): 399  
3/3,K/1 (Item 1 from file: 24) Links

Fulltext available through: STIC Full Text Retrieval Options

CSA Life Sciences Abstracts

(c) 2009 CSA. All rights reserved.

0003292686 IP Accession No: 8320169

Inhibition of Airway Allergic Disease by Co-Administration of Flagellin with Allergen

Lee, Shee Eun; Koh, Youngil I; Kim, Mi-Kwang; Kim, Young Ran; Kim, Soo Young; Nam, Jong Hee; Choi, Yoo Duk; Bae, Soo Jang; Ko, Young Jong; Ryu, Hwa-Ja; Koh, Jeong Tae; Choy, Hyon E; Rhee, Joon Haeng Chonnam National University, 300 Yongbong-Dong, Puk-Ku, Gwangju, 500-757, South Korea, [mailto:selee@chonnam.ac.kr]  
Journal of Clinical Immunology , v 28 , n 2 , p 157-165 , March 2008

Publication Date: 2008

Publisher: Springer-Verlag, Tiergartenstrasse 17 Heidelberg 69121 Germany,  
[mailto:subscriptions@springer.de], [URL:http://www.springer.de/]

Document Type: Journal Article

Record Type: Abstract

Language: English

Summary Language: English

ISSN: 0271-9142

File Segment: Immunology Abstracts

Inhibition of Airway Allergic Disease by Co-Administration of Flagellin with Allergen

...Bae, Soo Jang; Ko, Young Jong; Ryu, Hwa-Ja; Koh, Jeong Tae; Choy, Hyon E; Rhee, Joon Haeng

Abstract:

Bacterial flagellin, which activates Toll-like receptor 5 and cytosolic pattern recognition receptor Ipaf, has a strong immunomodulatory activity. In the present study, we examined whether intranasal co-administration of flagellin with allergen could modulate established airway hyperresponsiveness and Th2 response using an ovalbumin (OVA)-sensitized mouse model. Balb/c mice sensitized with OVA were treated with OVA-flagellin (FlaB) mixture three times at 1-week intervals. Seven days after the final OVA-FlaB... airway eosinophilic inflammation, and OVA-specific Th2 cytokine productions in splenocytes. These results indicate that flagellin co-administered with allergen can modulate airway inflammatory response through

flagellin.txt

inhibition of Th2 responses, and flagellin can be considered as a component for allergen-specific immunotherapy.

Descriptors: Allergens; Allergic diseases; Animal models; Cytokines; Flagellin; Helper cells; Immunotherapy; Inflammation; Inhalation ; Lymphocytes T; Ovalbumin; Pattern recognition; Respiratory tract; Respiratory tract diseases...  
Identifiers:

3/3,K/2 (Item 2 from file: 24) Links

Fulltext available through: STIC Full Text Retrieval Options

CSA Life Sciences Abstracts

(c) 2009 CSA. All rights reserved.

0003181896 IP Accession No: 8039522

Stimulation by TLR5 Modulates Osteoclast Differentiation through STAT1/IFN- beta

Ha, Hyunil; Lee, Jong-Ho; Kim, Ha-Neui; Kwak, Han Bok; Kim, Hyun-Man; Lee, Shee Eun; Rhee, Joon Haeng; Kim, Hong-Hee; Lee, Zang Hee Department of Cell and Developmental Biology, Dental Research Institute, School of Dentistry, Seoul National University, Seoul. Research Institute of Vibrio Infection and Genome Research Center for Enteropathogenic Bacteria, Chonnam National University Medical School, Gwangju, Republic of Korea

Journal of Immunology , v 180 , n 3 , p 1382-1389 , February 1, 2008

Publication Date: 2008

Publisher: American Association of Immunologists, 9650 Rockville Pike Bethesda MD 20814-3998 USA, [URL:<http://www.jimmunol.org/>]

Document Type: Journal Article

Record Type: Abstract

Language: English

Summary Language: English

ISSN: 0022-1767

File Segment: Immunology Abstracts; Calcium & Calcified Tissue Abstracts

...Lee, Jong-Ho; Kim, Ha-Neui; Kwak, Han Bok; Kim, Hyun-Man; Lee, Shee Eun; Rhee, Joon Haeng; Kim, Hong-Hee; Lee, Zang Hee

Abstract:

...this modulation takes place remains unclear. In the present study, we examined the effects of flagellin, a specific microbial ligand of TLR5, on the receptor activator of NF- Kappa B ligand (RANKL)-stimulated osteoclastogenesis. Flagellin suppressed RANKL induction of c-Fos protein expression in bone marrow-derived macrophages without affecting... expression. Ectopic overexpression of c-Fos and a constitutively active form of NFATc1 reversed the flagellin-induced anti-osteoclastogenic effect. The inhibitory effect of flagellin was mediated by IFN- beta production. Flagellin stimulated IFN- beta expression and release in bone marrow-derived macrophages, and IFN- beta -neutralizing Ab prevented the flagellin-induced c-Fos down-regulation and the anti-osteoclastogenic effect. IFN- beta gene induction by flagellin, LPS, or RANKL was dependent on STAT1 activation. Treatment with flagellin or RANKL stimulated STAT1 activation, and STAT1 deficiency or the JAK2 inhibitor AG490 dramatically prevented IFN- beta induction in response to flagellin or RANKL. In addition, STAT1 deficiency abolished the anti-osteoclastogenic effect induced by flagellin or LPS. In contrast, flagellin stimulated osteoclast differentiation in cocultures of osteoblasts and bone marrow cells without inducing IFN- beta ...

Descriptors: Antibodies; Bone marrow; Flagellin; Janus kinase 2; Lipopolysaccharides; Macrophages; Molecular modelling; Monocytes; NF- Kappa B protein; Osteoblastogenesis; Osteoblasts; Osteoclastogenesis...

Identifiers:

3/3,K/3 (Item 3 from file: 24) Links

Fulltext available through: STIC Full Text Retrieval Options

Page 4

CSA Life Sciences Abstracts

(c) 2009 CSA. All rights reserved.

0002786711 IP Accession No: 6576963

A Bacterial Flagellin, *Vibrio vulnificus* FlaB, Has a Strong Mucosal Adjuvant Activity To Induce Protective Immunity

Lee, Shee Eun; Kim, Soo Young; Jeong, Byung Chul; Kim, Young Ran; Bae, Soo Jang; Ahn, Ouk Seon; Lee, Je-Jung; Song, Ho-Chun; Kim, Jung Mogg; Choy, Hyon E; Chung, Sun Sik; Kweon, Mi-Na; Rhee, Joon Haeng Research Institute of *Vibrio* Infection and Genome Research Center for Enteropathogenic Bacteria. National Research Laboratory of Molecular Microbial Pathogenesis and Department of Microbiology, Chonnam National University Medical School, Gwangju 501-746, South Korea. Department of Dental Pharmacology, Chonnam Dental Research Institute, College of Dentistry, Chonnam National University, Gwangju 500-757, South Korea. Departments of Internal Medicine. Nuclear Medicine, Chonnam National University Hwasun Hospital, 160 Ilsim-ri, Hwasoon, Chonnam 519-809, South Korea. Department of Microbiology, Hanyang University College of Medicine, Seoul 133-791, South Korea. Mucosal Immunology Section, International Vaccine Institute, Seoul 151-818, South Korea  
Infection and Immunity , v 74 , n 1 , p 694-702 , January 2006

Publication Date: 2006

Publisher: American Society for Microbiology, 1752 N Street N.W. Washington, DC 20036 USA, [URL:<http://www.asm.org/>]

Document Type: Journal Article

Record Type: Abstract

Language: English

Summary Language: English

ISSN: 0019-9567

Electronic Issn: 1098-5522

File Segment: Immunology Abstracts; Bacteriology Abstracts (Microbiology B)

A Bacterial Flagellin, *Vibrio vulnificus* FlaB, Has a Strong Mucosal Adjuvant Activity To Induce Protective Immunity

...Song, Ho-Chun; Kim, Jung Mogg; Choy, Hyon E; Chung, Sun Sik; Kweon, Mi-Na; Rhee, Joon Haeng

Abstract:

Flagellin, the structural component of flagellar filament in various locomotive bacteria, is the ligand for Toll... ..this study, we show the highly potent mucosal adjuvant activity of a *Vibrio vulnificus* major flagellin (FlaB). Using an intranasal immunization mouse model, we observed that coadministration of the flagellin with tetanus toxoid (TT) induced significantly enhanced TT-specific immunoglobulin A (IgA) responses in both... ..in the number of TLR5-expressing cells in cervical lymph nodes. These results indicate that flagellin would serve as an efficacious mucosal adjuvant inducing protective immune responses through TLR5 activation.

Descriptors: Flagellin; Adjuvants; Toll-like receptors; Lymph nodes; Immunoglobulin A; Epithelial cells; Filaments; NF- Kappa B protein...

Identifiers:

? e au=lee, shee?

Ref	Items	Index-term
E1	1	AU=LEE, SHEE-NA
E2	3	AU=LEE, SHEE-YONG
E3	0	AU=LEE, SHEE?
E4	1	AU=LEE, SHEEN WOO
E5	2	AU=LEE, SHEEN-JE
E6	1	AU=LEE, SHEEN-MOK
E7	8	AU=LEE, SHEEN-WOO
E8	10	AU=LEE, SHEENA
E9	1	AU=LEE, SHEENA R

flagellin.txt

```
E10      2  AU=LEE, SHEENA R.
E11      9  AU=LEE, SHEEYONG
E12      4  AU=LEE, SHEI WEN
E13      7  AU=LEE, SHEI-WEN
E14      5  AU=LEE, SHEILA
E15      1  AU=LEE, SHEILA ANNE
E16      1  AU=LEE, SHEILA GAIL
E17      1  AU=LEE, SHEILA JACKSON
E18      1  AU=LEE, SHEISHU
E19      1  AU=LEE, SHEK HO
E20      2  AU=LEE, SHELDON
E21      1  AU=LEE, SHELDON H.
E22      2  AU=LEE, SHELDON H. D
E23     20  AU=LEE, SHELDON H. D.
E24      1  AU=LEE, SHELDON H.D
E25     14  AU=LEE, SHELDON H.D.
Enter PAGE for more
```

? e au=lee, shee

Ref	Items	Index-term
E1	3	AU=LEE, SHEAU-YANN CATHERINE
E2	3	AU=LEE, SHEAYUN
E3	0	AU=LEE, SHEE
E4	49	AU=LEE, SHEE EUN
E5	2	AU=LEE, SHEE-CHIN
E6	5	AU=LEE, SHEE-EUN
E7	1	AU=LEE, SHEE-NA
E8	3	AU=LEE, SHEE-YONG
E9	1	AU=LEE, SHEEN WOO
E10	2	AU=LEE, SHEEN-JE
E11	1	AU=LEE, SHEEN-MOK
E12	8	AU=LEE, SHEEN-WOO
E13	10	AU=LEE, SHEENA
E14	1	AU=LEE, SHEENA R
E15	2	AU=LEE, SHEENA R.
E16	9	AU=LEE, SHEEYONG
E17	4	AU=LEE, SHEI WEN
E18	7	AU=LEE, SHEI-WEN
E19	5	AU=LEE, SHEILA
E20	1	AU=LEE, SHEILA ANNE
E21	1	AU=LEE, SHEILA GAIL
E22	1	AU=LEE, SHEILA JACKSON
E23	1	AU=LEE, SHEISHU
E24	1	AU=LEE, SHEK HO
E25	2	AU=LEE, SHELDON

Enter PAGE for more

? s e6

S4 5 AU='LEE, SHEE-EUN'

? rd

>>>W: Duplicate detection is not supported for File 393.  
Duplicate detection is not supported for File 391.  
Records from unsupported files will be retained in the RD set.  
S5 5 RD (UNIQUE ITEMS)

? rd

>>>W: Duplicate detection is not supported for File 393.  
Duplicate detection is not supported for File 391.  
Records from unsupported files will be retained in the RD set.  
S6 5 RD (UNIQUE ITEMS)

? t s6/3,k/1-5

flagellin.txt

>>>W: KWIC option is not available in file(s): 399

6/3,K/1 (Item 1 from file: 393) Links

Beilstein Database - Abstracts

(c) 2008 Beilstein GmbH. All rights reserved.

Beilstein Abstract Id: 6505604

Title: Inactivation of *Vibrio vulnificus* hemolysin by oligomerization but not proteolysis

Document Type: Journal Record Type: Abstract

Author: Shin, Sung-Heui; Sun, Hui-Yu; Choi, Mi-Hwa; Park, Ra-Young; Bai, Young-Hoon; Kim, Choon-Mee; Kim, Soo-Young; Kim, Young-Ran; Lee, Shee-Eun; Rhee, Joon-Haeng

Citation: Biol. Pharm. Bull. (2005) Series: 28-7, 1294 - 1297 CODEN: BPBLEO

Language: English

Abstract Language: English

Author: ...Park, Ra-Young; Bai, Young-Hoon; Kim, Choon-Mee; Kim, Soo-Young; Kim, Young-Ran; Lee, Shee-Eun; Rhee, Joon-Haeng

Patent Assignee:

6/3,K/2 (Item 1 from file: 399) Links

Fulltext available through: STIC Full Text Retrieval Options

CA SEARCH(R)

(c) 2009 American Chemical Society. All rights reserved.

145060561 CA: 145(4)60561f JOURNAL

Suppression and inactivation of *Vibrio vulnificus* hemolysin in cirrhotic ascites, a human ex vivo experimental system

Author: Choi, Mi-Hwa; Park, Ra-Young; Sun, Hui-Yu; Kim, Choon-Mee; Bai, Young-Hoon; Lee, Shee-Eun; Kim, Soo-Young; Kim, Young-Ran; Rhee, Joon-Haeng; Shin, Sung-Heui

Location: Research Center for Resistant cells, Chosun University Medical School, Gwangju, S. Korea

Journal: FEMS Immunol. Med. Microbiol.

Date: 2006

Volume: 47 Number: 2 Pages: 226-232

CODEN: FIMIEV

ISSN: 0928-8244

Language: English

Publisher: Blackwell Publishing Ltd.

6/3,K/3 (Item 2 from file: 399) Links

Fulltext available through: STIC Full Text Retrieval Options

CA SEARCH(R)

(c) 2009 American Chemical Society. All rights reserved.

144407846 CA: 144(22)407846e JOURNAL

Inactivation of *Vibrio vulnificus* hemolysin by oligomerization but not proteolysis

Author: Shin, Sung-Heui; Sun, Hui-Yu; Choi, Mi-Hwa; Park, Ra-Young; Bai, Young-Hoon; Kim, Choon-Mee; Kim, Soo-Young; Kim, Young-Ran; Lee, Shee-Eun; Rhee, Joon-Haeng

Location: Research Center for Resistant Cells, Chosun University Medical School, Gwangju, 501-759, S. Korea

Journal: Biol. Pharm. Bull.

Date: 2005

Volume: 28 Number: 7 Pages: 1294-1297

CODEN: BPBLEO

ISSN: 0918-6158

Language: English

Publisher: Pharmaceutical Society of Japan

6/3,K/4 (Item 3 from file: 399) Links

Fulltext available through: STIC Full Text Retrieval Options

CA SEARCH(R)

(c) 2009 American Chemical Society. All rights reserved.

flagellin.txt

138283805 CA: 138(19)283805v JOURNAL  
 Effect of salinity, temperature, and glucose on the production of *Vibrio vulnificus* hemolysin  
 Author: Kim, Hyun-Soo; Shin, Sung-Heui; Park, Hae-Ryoung; Lee, Shee-Eun; Kim, Choon-Mee; Kim, Soo-Young; Kim, Young-Ran; Lee, Hyun-Chul; Chung, Sun-Sik; Rhee, Joon-Haeng  
 Location: Department of Microbiology, Chonnam National University Medical School, Kwangju, 501-746, S. Korea  
 Journal: J. Bacteriol. Virol.  
 Date: 2002  
 Volume: 32 Number: 4 Pages: 355-365  
 CODEN: JBVOAH  
 ISSN: 1598-2467  
 Language: English  
 Publisher: Journal of Bacteriology and Virology

6/3,K/5 (Item 4 from file: 399) Links  
 Fulltext available through: STIC Full Text Retrieval Options  
 CA SEARCH(R)  
 (c) 2009 American Chemical Society. All rights reserved.

123006941 CA: 123(1)6941n JOURNAL  
 A study on the pathogenetic activity of the protease and hemolysin produced by *Vibrio vulnificus*. I. Biological properties of the hemolysin produced by *Vibrio vulnificus*  
 Author: Rhee, Joon-Haeng; Lee, Shee-Eun; Kwon, Hyoung-Cheol; Chang, Heung-Shik; Ryu, Phil-Youl; Chung, Sun-Sik  
 Location: Medical School, Chonnam National University, Kwangju, 501-190, S. Korea  
 Journal: Taehan Misaengmul Hakhoechi  
 Date: 1994  
 Volume: 29 Number: 5 Pages: 381-98  
 CODEN: TMHCDX  
 ISSN: 0253-3162  
 Language: Korean

? e au=kim, soo?

Ref	Items	Index-term
E1	11	AU=KIM, SOO-ZIN
E2	1	AU=KIM, SOO, OK
E3	0	AU=KIM, SOO?
E4	1	AU=KIM, SOO=CHU
E5	4	AU=KIM, SOOAH
E6	1	AU=KIM, SOOBANG CHANG
E7	2	AU=KIM, SOOBUM
E8	3	AU=KIM, SOOCHAN
E9	1	AU=KIM, SOOCHEOL
E10	52	AU=KIM, SOOCHONG
E11	2	AU=KIM, SOOCHUL
E12	11	AU=KIM, SOODAN
E13	1	AU=KIM, SOODONG
E14	1	AU=KIM, SOOG PYUNG
E15	2	AU=KIM, SOOGYUN
E16	5	AU=KIM, SOOH-IH
E17	4	AU=KIM, SOOHEE
E18	36	AU=KIM, SOOHO
E19	22	AU=KIM, SOOHONG
E20	2	AU=KIM, SOOHONG P.
E21	10	AU=KIM, SOOHWAN
E22	82	AU=KIM, SOOHYUN



E23 11 AU=KIM, SOOHYUNG  
 E24 8 AU=KIM, SOOIL  
 E25 1 AU=KIM, SOOIN  
 Enter PAGE for more

? e au=kim, soo-young?

Ref	Items	Index-term
E1	179	AU=KIM, SOO-YOUNG
E2	1	AU=KIM, SOO-YOUNG DAVID
E3	0	AU=KIM, SOO-YOUNG?
E4	1	AU=KIM, SOO-YUL
E5	3	AU=KIM, SOO-YUN
E6	3	AU=KIM, SOO-YUNG
E7	1	AU=KIM, SOO-Z.
E8	11	AU=KIM, SOO-ZIN
E9	1	AU=KIM, SOO, OK
E10	1	AU=KIM, SOO=CHU
E11	4	AU=KIM, SOOAH
E12	1	AU=KIM, SOOBANG CHANG
E13	2	AU=KIM, SOOBUM
E14	3	AU=KIM, SOOCHAN
E15	1	AU=KIM, SOOCHEOL
E16	52	AU=KIM, SOOCHONG
E17	2	AU=KIM, SOOCHUL
E18	11	AU=KIM, SOODAN
E19	1	AU=KIM, SOODONG
E20	1	AU=KIM, SOOG PYUNG
E21	2	AU=KIM, SOOGYUN
E22	5	AU=KIM, SOOH-IH
E23	4	AU=KIM, SOOHEE
E24	36	AU=KIM, SOOHO
E25	22	AU=KIM, SOOHONG

Enter PAGE for more

? s e1-e2

	179	AU=KIM, SOO-YOUNG
	1	AU=KIM, SOO-YOUNG DAVID
S7	180	S E1-E2

? s s7 and flagellin

	180	S7
	24182	FLAGELLIN
S8	0	S S7 AND FLAGELLIN

? s s7 and flag?

	180	S7
	345152	FLAG?
S9	0	S S7 AND FLAG?

? s (flagell? and (typhimurium or monocytogenes or vulnificus))

	262298	FLAGELL?
	261285	TYPHIMURIUM
	131792	MONOCYTOGENES
	15801	VULNIFICUS
S10	9083	S (FLAGELL? AND (TYPHIMURIUM OR MONOCYTOGENES OR VULNIFICUS))

?

? s (s10 and (Vibrio or Salmonella or Listeria))

	9083	S10
	182508	VIBRIO
	560029	SALMONELLA
	152967	LISTERIA
S11	9004	S (S10 AND (VIBRIO OR SALMONELLA OR LISTERIA))

flagellin.txt

```
? s s11 and flagellin
9004 S11
24182 FLAGELLIN
S12 3301 S S11 AND FLAGELLIN

? s s12 and (adjuvant or vaccine or immunogen? or immun? or response or administ?
or intra? or oral)
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
Processing
3301 S12
638474 ADJUVANT
1073307 VACCINE
514111 IMMUNOGEN?
16754973 IMMUN?
12592140 RESPONSE
10550803 ADMINIST?
11450850 INTRA?
3592494 ORAL
S13 1637 S S12 AND (ADJUVANT OR VACCINE OR IMMUNOGEN? OR IMMUN? OR RESPONSE
OR ADMINIST? OR INTRA? OR ORAL)

?
? s s13 and (immuniz? or administ? or intra?)
Processing
Processing
Processing
Processing
Processing
Processing
Processing
1637 S13
883452 IMMUNIZ?
10550803 ADMINIST?
11450850 INTRA?
S14 601 S S13 AND (IMMUNIZ? OR ADMINIST? OR INTRA?)

? s s14 and flagellin
601 S14
24182 FLAGELLIN
S15 601 S S14 AND FLAGELLIN

? s s15 and response
601 S15
12592140 RESPONSE
S16 273 S S15 AND RESPONSE
```

flagellin.txt

? rd

Processing

Processing

>>>W: Duplicate detection is not supported for File 393.

Duplicate detection is not supported for File 391.

Records from unsupported files will be retained in the RD set.

S17 108 RD (UNIQUE ITEMS)

? s s17 and salmonella

108 S17

560029 SALMONELLA

S18 90 S S17 AND SALMONELLA

? s s18 and vibrio

90 S18

182508 VIBRIO

S19 5 S S18 AND VIBRIO

? t s19/3,k/1-5

>>>W: KWIC option is not available in file(s): 399

19/3,K/1 (Item 1 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

(c) 2009 The Thomson Corp. All rights reserved.

10563749 Genuine Article#: 542PB No. References: 75

A two-component regulator induces the transmission phenotype of stationary-phase *Legionella pneumophila*

Author: Hammer BK; Tateda ES; Swanson MS (REPRINT)

Corporate Source: Univ Michigan,Sch Med, Dept Microbiol & Immunol,6734 Med Sci Bldg  
2/Ann Arbor//MI/48109 (REPRINT); Univ Michigan,Sch Med, Dept Microbiol & Immunol,Ann  
Arbor//MI/48109

Journal: MOLECULAR MICROBIOLOGY , 2002 , V 44 , N1 ( APR ) , P 107-118

ISSN: 0950-382X Publication date: 20020400

Publisher: BLACKWELL PUBLISHING LTD , P O BOX 88, OSNEY MEAD, OXFORD OX2 ONE, OXON,  
ENGLAND

Language: English Document Type: ARTICLE ( ABSTRACT AVAILABLE )

Abstract: ...proficient at both replication and transmission. In laboratory cultures, as nutrients become scarce a stringent response-like pathway coordinates exit from the exponential growth phase with induction of traits correlated with virulence, including motility. A screen for mutants that express the flagellin gene poorly identified five activators of virulence: LetA/LetS, a two-component regulator homologous to GacA/GacS of *Pseudomonas* and SirA/BarA of *Salmonella*; the stationary-phase sigma factor RpoS; the flagellar sigma factor FliA; and a new locus, letE. Unlike wild type, post-exponential-phase letA... ..the exponential phase, but only wild type converted to the fully virulent form. In contrast, intracellular replication was independent of letA, letS, letE or fliA. Together, the data indicate that, as...

Identifiers-- ...VIRULENCE GENE-EXPRESSION; SYRINGAE PV SYRINGAE; ESCHERICHIA-COLI; PSEUDOMONAS-FLUORESCENS; INTRACELLULAR GROWTH; MYXOCOCCUS-XANTHUS; VIBRIO-CHOLERAE; 2-COMPONENT REGULATORS; SALMONELLA- TYPHIMURIUM; RESPONSE-REGULATOR

19/3,K/2 (Item 2 from file: 34) Links

Fulltext available through: STIC Full Text Retrieval Options

SciSearch(R) Cited Ref Sci

(c) 2009 The Thomson Corp. All rights reserved.

02569707 Genuine Article#: LM260 No. References: 52

A PHOP-REPRESSED GENE PROMOTES SALMONELLA-TYPHIMURIUM INVASION OF EPITHELIAL-CELLS

Author: BEHLAU I; MILLER SI

Corporate Source: MASSACHUSETTS GEN HOSP,INFECT DIS UNIT/BOSTON//MA/02114; HARVARD

UNIV,SCH MED/BOSTON//MA/02115

Journal: JOURNAL OF BACTERIOLOGY , 1993 , V 175 , N14 ( JUL ) , P 4475-4484

ISSN: 0021-9193

Language: ENGLISH Document Type: ARTICLE ( Abstract Available )

A PHOP-REPRESSED GENE PROMOTES SALMONELLA-TYPHIMURIUM INVASION OF EPITHELIAL-CELLS

Abstract: The Salmonella typhimurium transcriptional regulators, PhoP/PhoQ, induce phoP-activated gene (pag) expression to promote virulence and intracellular survival within macrophages. This response to the macrophage intracellular environment is simulated by phoP/phoQ constitutive mutations (phenotype PhoP(c)) that increase the expression... ..regulon. One prg locus, prgH, was demonstrated to contribute to mouse virulence by both the oral and the intraperitoneal routes. prgH was located at 59 min on the Salmonella chromosome, a region where other genes essential to invasion of epithelial cells are clustered. The... ..that result in a hyperinvasive or hd phenotype. Both PrgH and PhoP(c) mutant S. typhimurium were found to be defective in induction of endocytosis by Madin-Darby canine kidney (MDCK... ..mutant bacteria was complemented by plasmids containing prgH (hil) DNA. Therefore, two virulence properties of Salmonella species, induction of endocytosis by epithelial cells and survival within macrophages, are oppositely modulated by... Identifiers-- ...VIBRIO-CHOLERA; VIRULENCE DETERMINANTS; ESCHERICHIA-COLI; DNA FRAGMENTS; MACROPHAGES; MUTATIONS; PROTEINS; PHOSPHATASES; CONSTRUCTION; RESISTANCE Research Fronts: ...GENE; CDNA FOR STIMULATORY GDP/GTP EXCHANGE PROTEIN; EXPRESSION OF MESSENGER-RNA)

91-5452 001 (LISTERIA- MONOCYTOGENES VIRULENCE FACTORS; BACTERIAL ENTRY; HOST-CELLS INVITRO; HEAT-SHOCK PROTEINS)

91-8074 001 (FLAGELLIN SYNTHESIS IN SALMONELLA-TYPHIMURIUM; TRYPTOPHAN-SPECIFIC PERMEASE OF ESCHERICHIA-COLI K-12; RFB REGION; TRP PROMOTER; MOLECULAR MECHANISM)

Cited References:

19/3,K/3 (Item 1 from file: 370) Links

Science

(c) 1999 AAAS. All rights reserved.

00500653 (USE 9 FOR FULLTEXT)

Modulation of Virulence Factor Expression by Pathogen Target Cell Contact

Pettersson, Jonas; Nordfelth, Roland; Dubinina, Elena; Bergman, Tomas; Gustafsson, Mikael; Magnusson, Karl Eric; Wolf-Watz, Hans

J. Pettersson, R. Nordfelth, E. Dubinina, T. Berman, H. Wolf-Watz, Department of Cell and Molecular Biology, University of Umea, S-901 87 Umea, Sweden. ; M. Gustafsson and K. E. Magnusson, Department of Medical Microbiology, University of Linkoping, S-581 85 Linkoping, Sweden.

Science Vol. 273 5279 pp. 1231

Publication Date: 8-30-1996 ( 960830 ) Publication Year: 1996

Document Type: Journal ISSN: 0036-8075

Language: English

Section Heading: Reports

Word Count: 2535 (THIS IS THE FULLTEXT)

Abstract:

...LcrQ, a negative regulator of Yop expression, via the Yop-type III secretion system. The intracellular concentration of LcrQ was thereby lowered, resulting in increased expression of Yops. These results suggest...

Text:

...B10) (B11) (B12) , which has a high level of homology with the corresponding systems of Salmonella and Shigella. These systems are functionally conserved, allowing both the secretion and translocation of

heterologous...

...proteins across the target cell membrane (B12) (B13) . Moreover, *Shigella* shows a target cell-induced response, manifested by the rapid release of the Ipa proteins to the culture medium (B14) (B15) , and *Salmonella* rapidly induces the formation of new surface structures upon cell contact (B16) . Thus, these three...

...monitor the level of gene expression in individual bacteria. We used the LuxAB protein of *Vibrio harveyi* as a reporter for transcription (B18) . This protein catalyzes a reaction emitting photons at...secretion of Yops (B20) , and we speculated that LcrQ might be secreted to lower the intracellular concentration of LcrQ and thus derepress Yop expression. To study the localization of LcrQ, we...

...and C (B22) . Although the total amount of LcrQ is higher under inductive conditions, the intracellular concentration is lower when compared with noninduced bacteria, suggesting that the intracellular concentration of LcrQ is regulated by secretion...

...with Ca<sup>sup(2+)</sup> to a medium without Ca<sup>sup(2+)</sup>. A decline in the intracellular concentration of LcrQ was observed as early as 3 min after the shift, and after...

...the bacteria (Fig. 4 ). Yop expression began to increase 5 to 7 min after the intracellular concentration of LcrQ started to decline (Fig. 4), showing that LcrQ secretion precedes the derepression...secretion channel at the zone of contact, and this event triggers LcrQ secretion. Consequently, the intracellular LcrQ concentration is lowered, leading to derepression of Yop expression. The export channels facing the ...

...striking similarities with a recent model presented for the regulation of the biosynthesis of the flagellum of *Salmonella typhimurium* (B23) . The regulation involves the negative regulator FlgM (anti- (final-sigma) <sup>sup(28)</sup>), which is...

...the same secretion system (showing homology with the Ysc system) that mediates export of the flagellin subunits to the surface of the bacteria (B23) . Preliminary results indicate that LcrQ is not...

...1% Triton X-100 for 5 min, and the total volume was collected for protein immunoblot analysis and viable bacteria count determination. The Yop expression was compared with a control culture...

...serial dilutions of the samples (cells +). The blots were developed with an Amersham ECL-protein immunoblot kit according to instructions from the manufacturer. The amount of protein used for the blot...

...Figure Removed

Figure F3

Caption: Intracellular concentration of LcrQ correlates with Yop expression. Overnight cultures grown at 26.Deg.C in...

...x 10<sup>sup(7)</sup> bacteria, were separated on SDS-PAGE and analyzed by ECL protein immunoblotting as described (B25) . (A and B) Bacterial pellets from the wild type and the lcrQ...

...yscS (B21) mutants and (C) the supernatant from the wild type were analyzed by protein immunoblotting with antiserum recognizing all Yops [panel (A)] or recognizing LcrQ [panels (B) and (C)]. (DFigure Removed

Figure F4

Caption: Rapid decrease in the intracellular concentration of LcrQ

flagellin.txt

after a shift from Ca.sup(2+)-containing to Ca.sup(2...

...to 5 x 10.sup(6) bacteria were analyzed by SDS-PAGE and ECL protein immunoblotting with antiserum recognizing all Yops or antiserum to LcrQ. The time after shift includes a...

#### References and Notes:

...3. Straley, S. C., Skrzypek, E., Plano, G. V., Bliska, J. B., Infect. Immun., 61 1993, 3105...

19/3,K/4 (Item 1 from file: 357) Links

Derwent Biotech Res.

(c) 2008 Thomson Reuters. All rights reserved.

0378939 DBA Accession No.: 2005-24645 PATENT

Composition for stimulating immune system in subject against *Listeria monocytogenes*, has pathogen associated molecular pattern that activates TLR2 and TLR5, and distinct *L. monocytogenes* antigens pathogen associated molecular pattern for use in immune system induction

Author: POWELL T J; MEDZHITOV R M

Patent Assignee: UNIV YALE; VAXINNATE CORP 2005

Patent Number: WO 200577408 Patent Date: 20050825 WPI Accession No.: 2005-582850 ( 200559 )

Priority Application Number: US 542739 Application Date: 20040206

National Application Number: WO 2005US3367 Application Date: 20050204

Language: English

Composition for stimulating immune system in subject against *Listeria monocytogenes*, has pathogen associated molecular pattern that activates TLR2 and TLR5, and distinct *L. monocytogenes* antigens pathogen associated molecular pattern for use in immune system induction

Abstract: ...activates at least one member chosen from TLR2 and TLR5, and at least two distinct *Listeria monocytogenes* antigens, is new. DETAILED DESCRIPTION - A composition (I), comprises: (a) a pathogen associated molecular pattern...  
...activates at least one member chosen from TLR2 and TLR5, and at least two distinct *Listeria monocytogenes* antigens; (b) a pathogen associated molecular pattern that activates at least one member chosen from TLR2 and TLR5, and a *L.monocytogenes* antigen that is not listeriolysin; or (c) a pathogen associated molecular pattern that activates at least one member chosen from TLR2 and TLR5, and *L. monocytogenes* p60 antigens. INDEPENDENT CLAIMS are also included for: (1) composition (C1) comprising SEQ ID No... ...a pathogen associated molecular pattern that activates TLR2 or TLR5, at least two distinct *L.monocytogenes* antigens; (4) nucleic acid construct (III) encoding SEQ ID No: 12, SEQ ID No: 14... ...construct (V) encoding a pathogen associated molecular pattern that activates TLR2 or TLR5, and *L.monocytogenes* antigen that is not listeriolysin or *L.monocytogenes* p60 antigen; (7) a vector (VI) comprising (II) or (V); (8) a host cell (H1)...  
...pathogen associated molecular pattern that activates TLR2 or TLR5, and at least two distinct *L. monocytogenes* antigens, and isolating the fusion protein produced by the host cell; (b) culturing a host... ...fusion protein including a pathogen associated molecular pattern that activates TLR2 or TLR5, and *L. monocytogenes* antigen that is not listeriolysin, and isolating the fusion protein produced by the host cell ... ...fusion protein including a pathogen associated molecular pattern that activates TLR2 or TLR5, and *L. monocytogenes* p60 antigen, and isolating the fusion protein produced by the host cell. BIOTECHNOLOGY - Preferred Composition: In (I), the pathogen associated molecular pattern and *L.monocytogenes* antigens are components of a fusion protein. The pathogen associated molecular pattern activates a TLR2... ...molecular pattern includes at least a fragment of SEQ ID No: 1 and the *L. monocytogenes* antigens include at least a fragment of each of SEQ ID No: 7 and SEQ... ...TLR5 signaling pathway. The pathogen associated molecular pattern is at least a fragment of a flagellin. The flagellin includes a polypeptide chosen from *Helicobacter pylori*, *Vibrio cholera*, *Serratia marcescens*, *Shigella flexneri*,

flagellin.txt

Treponema pallidum, Legionella pneumophila, Borrelia burgdorferi, Clostridium difficile, Rhizobium meliloti, Agrobacterium tumefaciens, R.lupine, Bartonella clarridgeiae, Proteus mirabilis, Bacillus subtilis, L.monocytogenes, Pseudomonas aeruginosa and E.coli. The flagellin is chosen from Salmonella typhimurium fljB and E.coli FlhC. The S. typhimurium fljB includes at least a fragment of SEQ ID No: 5. The pathogen associated molecular... ..lipopeptides, outer membrane proteins (OMPs), outer surface proteins (OSPs), protein components of bacterial cell walls, flagellins, bacterial DNAs, single and double-stranded viral RNAs, unmethylated CpG-DNAs, mannans, mycobacterial membranes, and... ..molecular pattern includes at least a fragment of SEQ ID No: 3 and the L. monocytogenes antigens include at least a fragment of each of SEQ ID No: 7 and SEQ... ..No: 7 and SEQ ID No: 8. The pathogen associated molecular pattern and the L. monocytogenes p60 antigen are components of a fusion protein. (C1) further includes at least one additional L. monocytogenes antigen. The additional L. monocytogenes antigen is listeriolysin. Preferred Construct: In (II), the antigens are encoded by the nucleic acid ... ..No: 10. ACTIVITY - Antibacterial; Gastrointestinal-Gen. No supporting data is given. MECHANISM OF ACTION - Stimulates immune response (claimed). USE - (I) is useful for stimulating immune system in a subject (claimed) against L.monocytogenes causing gastroenteritis. ADMINISTRATION - (I) is administered orally, intravenously, intraperitoneally, subcutaneously or intramuscularly. No dosage given.(77 pages) E.C. Numbers:

Descriptors: pathogen associated molecular pattern composition, fusion protein, Listeria monocytogenes antigen activation, vector-mediated gene transfer expression in host cell, appl. gastroenteritis, immune system induction bacterium (24, 40)

19/3,K/5 (Item 2 from file: 357) Links

Derwent Biotech Res.

(c) 2008 Thomson Reuters. All rights reserved.

0377181 DBA Accession No.: 2005-22887 PATENT

Mucosal vaccine adjuvants for preventing infectious diseases, anticancer and for contraception, comprises bacterial flagellins, as active component bacterium flagellin and gene substitution for vaccine and disease therapy or prevention

Author: RHEE J H; LEE S E; KIM S Y

Patent Assignee: UNIV CHONNAM NAT 2005

Patent Number: WO 200570455 Patent Date: 20050804 WPI Accession No.: 2005-542230 ( 200555 )

Priority Application Number: KR 1974 Application Date: 20040112

National Application Number: WO 2005KR103 Application Date: 20050112

Language: English

Mucosal vaccine adjuvants for preventing infectious diseases, anticancer and for contraception, comprises bacterial flagellins, as active component bacterium flagellin and gene substitution for vaccine and disease therapy or prevention

Abstract: DERWENT ABSTRACT: NOVELTY - Mucosal vaccine adjuvants (I), comprises bacterial flagellins, as an active component. DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1) producing (M1) immunogen having adjuvant activity by flagellin, involves substituting the genes encoding protein antigen epitopes for the genes between the N-terminal... ..278-377 and FlaE of amino acid sequence 276-375 among the structural components of Vibrio vulnificus set out in SEQ ID No. 1-12; and (2) mucosal vaccine adjuvants (II), comprising immunogens prepared by (M1), as an active component. BIOTECHNOLOGY - Preferred Adjuvant: In (I), the flagellins are originated from V. vulnificus, Salmonella typhimurium, Listeria monocytogenes. The flagellins are chosen from flagellin proteins of V.vulnificus having SEQ ID No. 2, 4, 6, 8, 10 or 12, encoded by FlaA, FlaB... ..5, 7, 9 or 11, respectively. In (II), the adjuvants are for the anti-toxin vaccine against tetanus toxoid and so on, the live attenuated or killed vaccines against cholera, typhoid fever, the anti-viral vaccine against influenza, severe acute respiratory syndrome, the anti-cancer vaccines against uterine cervical cancer, the anti-sperm contraceptive vaccine or the recombinant protein or peptide vaccine. Preferred Method: In (M1), the protein antigen epitopes are tetanus toxoid, immunogenic epitopes of influenza virus, immunogenic epitopes of human papilloma virus that induces uterine cervical cancer, pneumococcal antigen PspA or sperm. ACTIVITY -

# flagellin.txt

Antimicrobial; Cytostatic; Contraceptive. MECHANISM OF ACTION - Vaccine. The antigen specific systemic immune response and mucosal immune adjuvanticity of the recombinant flagellin was carried out as follows. Seven-week-old Balb/c mice were intranasally immunized 3 times with phosphate buffered saline (PBS), tetanus toxoid or with combinations of 3 of tetanus toxoid (TT) and of FlaB of V.vulnificus (Vv) at 7 day interval. Seven days after the last immunization, saliva, vaginal wash, and serum samples were collected to assess TT-specific systemic immune responses and mucosal immune responses. These responses were measured by enzyme linked immunosorbant assay (ELISA). The mice that were vaccinated 3 times before were observed for 7 days after systemic administration of 200 folds of lethal doses of (TT). Results indicated that the antigen specific systemic immune response and mucosal immune response was higher in the group of TT+Vv-FlaB than that in the group of... ..vaccines that is useful for preventing infectious diseases, cancer, and also useful in contraception etc. ADMINISTRATION - (I) is administered by mucosal route (claimed), or by subcutaneous, intravenous, intramuscular or oral route. No dosage given. EXAMPLE - No relevant example is given.(21 pages)

E.C. Numbers:

Descriptors: Vibrio vulnificus, Salmonella typhimurium, Listeria monocytogenes flagellin, FlaA, FlaB, FlaF, FlaC, FlaD, FlaE gene substitution, human papilloma virus, influenza virus, severe-acute-respiratory-syndrome virus, antitumor vaccine, uterus cervix cancer live, attenuated, killed vaccine composition, anti-sperm contraceptive vaccine, recombinant protein, peptide vaccine, ELISA, immunization in mouse, appl. infectious disease, cancer therapy, prevention bacterium papova virus orthomyxo virus SARS virus corona virus analysis immunoassay DNA sequence protein sequence (24, 37)

? d s

Set	Items	Description
S1	364	S E4-E21
S2	14	S S1 AND FLAGELLIN
S3	9	RD (unique items)
S4	5	AU='LEE, SHEE-EUN' FROM 5, 6, 24, 34, 40, 41, 45, 50, 65, 71, 72, 73, 76, 98, 103, 136, 143, 144, 154, 155, 156, 162, 172, 305, 369, 370, 393, 399, 434, 28, 35, 44, 91, 110, 135, 164, 185, 357, 391, 467, 8, 99, 266, 315, 358, 138, 149, 159, 444
S5	5	RD (unique items)
S6	5	RD (unique items)
S7	180	S E1-E2
S8	0	S S7 AND FLAGELLIN
S9	0	S S7 AND FLAG?
S10	9083	S (FLAGELL? AND (TYPHIMURIUM OR MONOCYTOGENES OR VULNIFICUS))
S11	9004	S (S10 AND (VIBRIO OR SALMONELLA OR LISTERIA))
S12	3301	S S11 AND FLAGELLIN
S13	1637	S S12 AND (ADJUVANT OR VACCINE OR IMMUNOGEN? OR IMMUN? OR RESPONSE OR ADMINIST? OR INTRA? OR ORAL)
S14	601	S S13 AND (IMMUNIZ? OR ADMINIST? OR INTRA?)
S15	601	S S14 AND FLAGELLIN
S16	273	S S15 AND RESPONSE
S17	108	RD (unique items)
S18	90	S S17 AND SALMONELLA
S19	5	S S18 AND VIBRIO

?